Rate of oxygen consumption and size of the bivalvular mollusk Teredo
Rate of oxygen consumption and size of the bivalvular mollusk Teredo
navalis L. Trudy Inst. okean. 49:156-161 '61. (MIRA 15:1)
(Shipworms) (Respiration)

Effect of different salinity conditions on the bivalvular moliusk
Teredo navalis L. Trudy Inst. okean. 49:162-179 '61. (MARA 15:1)
(Black Sea--Shipworms) (Salinity)

SOLDATOVA, I.N.

Reaction of the Black Sea lamellibranchiate mollusks of the family Teredinidae to changes in the salinity of the environment. Vop. ekol. 5:205-206 '62. (MIRA 16:6)

1. Institut okeanologii AN SSSR, Moskva.
(Black Sea-Shipworms) (Salinity)

List and the state of the state

RYABCHIKOV, P.I.; SOLDATOVA, I.N.; YESAKOVA, S.Ye.; PETUKHOVA, T.A.

Beginning of settling of the Sea of Azov by some species of shipworms of the family Teredinidae. Trudy Inst. okean. 70: 157-178 163. (MIRA 17:7)

SOLDATOVA, I.II.

Effect of water of various salinity on some physiological processes of the bivalve nollinsk Teredo pedicellata Quatrefages in the Black Sea. Trudy Inst. okean. 70:186-196 (MIRA 17.7)

ISKRA, Ye.V.; TURPAYEVA, Ye.P.; ELETATIVA, I.N.; SIERRIA, R.G.

Effect of some poisonous substances on the major fouling organisms in Taganrog Bay. Trudy Inst. okean. 70.259-269 163. (MIRA 17:7)

TSITENKO, N.D.; SOLDATOVA, K.S.

Natural gases of Sakhalin. Trudy WNIGRI no.224:59-66 (MIRA 17:2)

L 37025-65 EWI(m)/EWP(t)/EWP(b) IJP(c) JD/JG
ACCESSION NR: AR50C 2000 8/0081/64/000/069/G024/G024

SOURCE: Ref. zh. Khimiya. Abs. 19G129

AUTHOR: Soldatova, L. A.; Kristaleva, L. B.

TITLE: Photometric determination of microgram quantities of phosphorus in arsenic and gallium arsenide

CITED SOURCE: Tr. Tomskogo un-ta, v. 157, 1963, 279-282

TOPIC TAGS: quantitative analysis, phosphorus determination, colorimetry, arsenic

analysis, gallium arsenide purity, phosphomolybdate complex

TRANSIATION: 0.1-0.5 g of arsenic or gallium arsenide are dissolved in 5-7 ml of agua regia in a quartz evaporating dish with moderate heating; the solution is

TRANSLATION: 0.1-0.5 g of arsente of gartam moderate heating; the solution is aqua regia in a quartz evaporating dish with moderate heating; the solution is evaporated to dryness, 2-3 ml of 8 N HCl are added, the solution is evaporated again, 3-4 ml of 8 N HBr and 5 ml of 8 N HCl are added, the solution is evaporated to dryness, the residue is taken up in 2-3 ml water and 1 ml of 6 N HCl and heated. After cooling, the solution is transferred to a separatory funnel, treated with 1 ml of a 5%

Card 1/2

chan :					
L 37025+55 Accession NR: AR500		The second second		en e	0
solution of ammonium allowed to stand 3-5 ether; the aqueous 1 times, after which t prepared 1% solution stand for 5 minutes 2-cm cuvettes. The	ayer is then dische combined extra of SnCl <sub>2</sub> , dilute and read in a phone	carded and the acts are treate ed to 10 ml wit otoelectric col	extraction is d with 0.2 ml h ehtyl ether orimeter with	repeated 2 m of a freshly , allowed to a red filter complex is 1	in
700; the sensitivity	of the determin	etion of P is 0	.02 µ/m1. F.	Sudakov.	
Sub code: of, ss		ENCL: 00			
Card 2/2 60					

AFETR L 12019-65 S/0075/64/019/010/1267/1269 AP4047500 ACCESSION NRI Soldatova, L. A.; Kilina, Z. G.; Katayev, G. A. B AUTHOR: TITLE: Separation of antimony by contact deposition and its photo-. metric determination with brilliant green 1 SOURCE: Zhurnal analiticheskoy khimii, v. 19, no. 10, 1964, 1267-1269 TOPIC TAGS: antimony photometric determination, antimony separation, trace analysis, indium zinc alloy, indium gallium alloy, alloy chemical analysis, trace importer determination, antimony separation, cal analysis, trace impurity determination, antimony contact deposition ABSTRACT: A solvent extraction-photometric method of determination of ADDIKATE A SOLVENT extraction-photometric method of determination of microgram quantities of antimony in indium-sinc and indium-gallium alloys has been developed. The method requires a preliminary separation of Sb from indium, sinc, gallium, gold, and thallium, which was achieved by contact deposition of Sb from a hydrochloric solution onto high-purity-tin. The antimony deposit was dissolved in HgSO, + HKO; and the entimony in the solution, after a chemical treatment, was Card 1/2

12019 <b>-</b> 65 CCESSION	NR: AP404	7500		- <b></b>			1
enzene f f the be he optimere work	with brill rom a 2-4N nsene solut um conditio ed out. It curves the do not inte	hydrochlor ion was de ons for con was estab	ic acid termined tact depo lished f	solution with an sition a rom the 3+ and	e and the ( FEK-57 pho nd bensene optical des T13+ can be	tocolori extracti sity-MCl	ne teri
he metho 10%, Or	d is 5 x 10 ig. art. he	er 2 figu	res.	SETAS SE	tot or gor.		
n Ap A we ye	AT (LOFFE	State Univ	ererty)				
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1999年 · 沙潭 医外外部部肿瘤 \*\*\*\*

Control of the Contro

PREOBRAZHENSKAYA, I.N.; SOLDATOVA, L.I.; TENKOVA, Ye.Ya.

Readers' comment or a book on the finishing of woolens. Tekst.prom.
20 no.3:74-75 Mr '60. (MIRA 14:5)

(Textile finishing)

504/69-21-4-8/22 5(4)

Gal perin, B.S. and Soldatova, L.P. (Leningrad)

AUTHOR: Orientation Effect in Lacquer Films With Carbon-Black Filler

TITLE: Kolloidnyy zhurnal, 1959, Vol XXI, Nr 4, pp 415-418 (USSR)

PERIODICAL: This is a study of the phenomenon of anisotropy of electric conductivity, which can be observed in carbon black lacquer ABSTRACT:

films obtained by dipping the film support into solution. The experiments were carried out with small marble rods 20 mm long and 4 mm thick. The thickness of the coating did not exceed 5-7 $\mu$ . The black carbon concentration in the film varied from 8 to 15%. Electric conductivity was measured along the rods, i.e. in the direction of running of the suspension. Other measurings, perpendicular to the mentioned direction, were made possible by grinding out a spiral around the rods. The

results of both kinds of measuring(resistance) were evaluated in surface units (equations 2 and 3.) The coefficient of aniso-

tropy was determined (equation 4). The experiments have shown

Card 1/2

SOV/69-21-4-8/22

Orientation Effect in Lacquer Films With Carbon-Black Filler

and the second second

that anisotropy of electric conductivity of carbon black lacquer films obtained in the above described way is connected with orientation of the carbon black chains in the direction of running of the suspension. The anisotropy increases at an increase in the rate of drying of the film, and diminution of its carbon black content. The orientation effect in the films can be eliminated by introducing a small graphs and 1 photograph.

SUBMITTED:

March 1, 1958

Card 2/2

MOLOTKOVS'KIY, G.Kh.; LOPUSHANS'KIY, P.I.; SOLDATOVA, M.A.

Growth dynamics of fruit and the fermation of vitamin C and oil in walnut fruit and leaves in connection with pelarity. Ukr.bet.zhur. 13 no.1:56-62 56. (MIRA 9:9)

1.Chernivets'kiy derzhavniy universitet, Kafedra fiziologii roslin.
(Walmut)

MOLOTKOVSKIY, G. Kh.: SOLDATOVA, M.A.

Polar formation and distribution of vitamin C and other reducing substances in Persian walnut plants. Mauch.dokl.vys.shkoly; biol.nauki no.3:154-159 158. (MIRA 11:12)

1. Predstavlena kafedroy fiziologii rasteniy Chernovitskogo gosudarstvennogo universiteta.
(Ascorbic acid) (Walnut) (Polarity (Biology))

Standardization of boxes for the food industry. Trudy HILtary no.2:43-50 158. (MIRA 13:12)

(Food industry—Equipment and supplies)

(Boxes--Standards)

Requirements of wooden 1 tes. Trudy NIL Tary no.4:34-38 '60.
(Boxes)

VYAZNIKOV, N.F.; YERMAKOV, S.S.; SOLDATOVA, N.N.

Cementation of chromium stainless steel. Trudy LPI no.202:87-90
'59.

(MIRA 12:12)

(Steel, Stainless) (Cementation (Metallurgy))

18.7500

78124

SOV/129-60-3-3/16

AUTHORS:

Vyaznikov, N. F., Yermakov, S. S., Soldatova, N. N. Candidates of Technical Sciences)

FUTLE

Case Hardening of Chromium Stainless Steel

PERIODICAL:

Metallovedeniye i termicheskaya obrabotka metallov, 1960, Nr 3, pp 11-13 (USSR)

ABSTRACT:

This is a report concerning the determination of a method of case hardening of steels 1Kh13 and 1Kh17, with the purpose of increasing the surface hardness of products made from them. Low-chromium stainless steel does not have a sufficient hardness In hardened state and therfore cannot be used for products subject to abrasion and compression wear, etc. The chemical composition of investigated steels

Card 1/4

Case Hardening of Chromium Stainless Steel

78124 SOV/129-60-3-3/16

Table 1.

***	CHEMICAL COMPUSITION							
DISTRIBU From LIERL	С	SI	Mn	Cr	NI			
IX13 IX17	0,12 0,10	0,75 0,80	0,86 0,90	13.3 18.0	0,20 0,80			

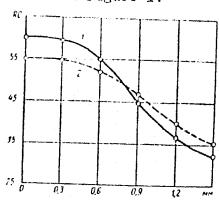
Case hardening was done in a solid carburizing agent, containing 85% of birch charcoal, 10% of sodium carbonate, and 5% of barium carbonate. The 20 x 20 x 60 mm samples were packed in Iron boxes, heated for 12 hr at 900°, 950°, 1,000°, and 1,050° C and cooled in the air. The hardness of samples, quenched from 1,000° C after case hardening for

Card 2/4

Case Hardening of Chromium Stainless Steel

78124 SOV/129-60-3-3/16

4-12 hr at various depths of case hardened layer, is illustrated in Figure 1.



DISTANCE FROM SURFACE

Fig. 1. Hardness of samples, hardened from  $1,000^{\circ}$  C, at various depths of case hardened layer: (1) steel 1Kh13; (2) steel 1Kh17.

Card 3/4

Case Hardening of Chromium Stainless Steel

78124 sov/129-60-3-3/16

The conducted tests proved that the maximum hardness of stainless steel (without case hardening) after quenching from 1,000-1,500°C is not over 30 RC, while after case hardening it increases to 55-60 RC. The steel which was case hardened at 950°C differs very little (in hardness) from the steel case hardened at 1,000°C. Therefore, the authors recommend case hardening components made from stainless steels lKh13 and lKh17 at 950°C and quenching them from 1,000°C. There are 2 figures; and 5 tables.

ASSOCIATION:

Leningrad Polytechnic Institute imeni M. I. Kalinin (Leningradskiy Politekhnicheskiy institut imeni M. I. Kalinina)

Card 4/4

SKLYAR, V.A.; AVRAMENKO, K.P.; PAVLOV, D.F.; BOBKOV, N.V.; BERESTOVAYA, R.V.; SKRYPNIK, Ye.P.; SEMONENKO, Ye.T.; SKRGEYEVA, V.P.; KOLYAKO, D.A., red.; SOLDATOVA, N.P., otvetstv.za vypusk; GRISHNYAYEV, B.G., tekhn.red.

[Economy of Kraenodar Territory; a statistical manual] Marodnoe khoziaistvo Kraenodarskogo kraia; statisticheskii sbornik.

Kraenodar, Gosstatizdat, 1958. 233 p. (MIRA 12:2)

1. Krasnodarskiy krav. Statisticheskoye upravleniye. 2. Nachal'nik Krasnodarskogo krayevogo statisticheskogo upravleniya (for Kolyako). (Krasnodar Territory--Statistics)

The crew method is introduced into hotels. Zhil.-komm. khoz. 13 no.2: 22 163. (MIRA 16:3)

1. Direktor moskovskoy gostinitsy "Kiyevskaya" (for Isotova).
2. Zaveduyushchaya etazhom moskovskoy gostinitsy "Kiyevskaya" (for Soldatova).
3. Rukovoditel' brigady kommunisticheskogo truda, moskovskaya gostinitsa "Kiyevskaya" (for Levchenko).

(Hotel housekeeping)

"The measures on prophylaxis of paratyphoid of silver-black foxes".

Omsk. 1952. 10 pages. (Siberian Zonal Scientific Research Veterinary Institute and Veterinary Department of the Oblast Administration of Agriculture)

So: Vet., Nov. 1952, Unclassified

A methodical letter to assist veterinary specialists who service animal (wild) farms.

Silver Fox - Parasites
"Hair enter" of silver foxes, Kar. i zver., 5, No. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, Cotoler 1952 1993, Uncl.

Fur-learing	Animals								
		sses in r	ations fo	r fur-hes	ring animal	s. Kar.	i zver.	6 No. 1, 195	i3 <b>.</b>
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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652210007-7"

SOLDATOVA, T.

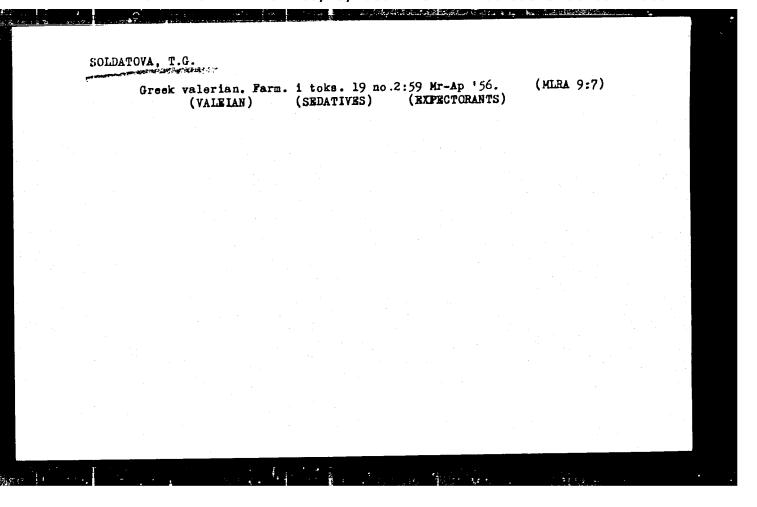
Calves

Stalin Collective Farm successfully raises calves in an unheated shed Sots. zhiv. 14 No. 2, 1952

9. Monthly List of Russian Accessions, Library of Congress, June 1951,2 Uncl.

SOLDATOVA, T.

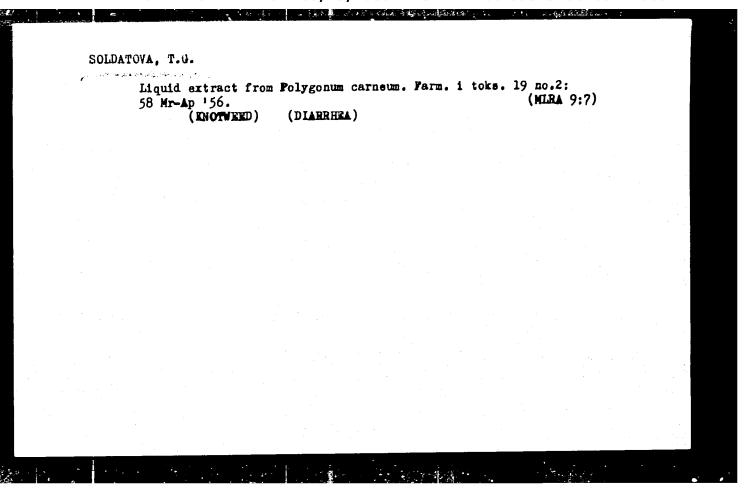
Erysimine. Nauka i zhimi 22 no.2:23 F '55. (MLRA 8:3)
(Botany, Medical) (Brysimum)



SOLDATOVA, T.G.

Filixan, Farm. i toks. 19 no.2:61 Mr-Ap '56. (MLRA 9:7)

(FILIC ACID) (TAPINORMS)



parties resolution in the second	Cuthiz	one (thiosemi 2:58-59 Mr-Ap (CUMALDEHYDE	156.	P-isopropy (INFLUENZA)	lbenzaldehyde	) Farm. (MLRA	1 toks. 9:7)	
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	ż							

SOLDATOVA, T.G.

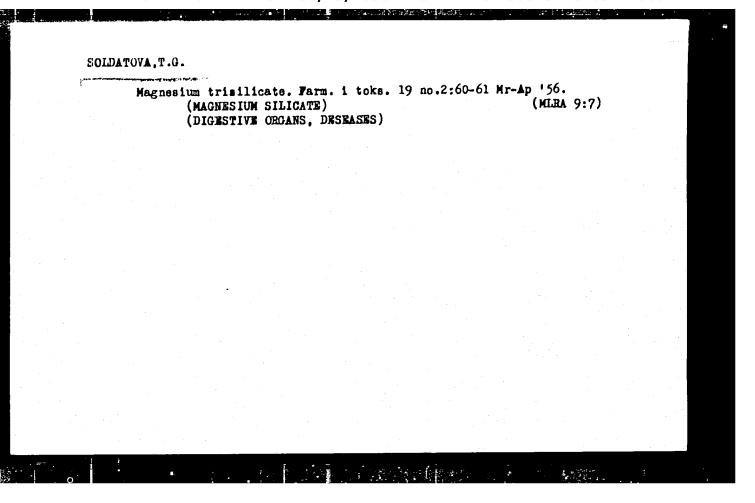
Tetridine, Farm. i toke. 19 no.2:59-60 Mr-Ap '56. (MIRA 9:7)
(PYRIDINE) (INSCHMIA)

Tablets from the dry extract of cudweed and Greek valerian. Farm.

i toks. 19 no.2:60 Mr-Ap '56. (MIRA 9:7)

(VALERIAN) (GUDWEED) (STOMACE--ULGERS)

(HYPERTENSION)



SOLDATOVA, T.G., farmatsevt.

The HF-6 adhesive. Nauka i zhizm' 23 no.3:34 Mr '56. (MIRA 9:7)

(Wounds---Treatment)

Medici	ne made of	corn. Nauka i z	:52 ¥ '56	6.		
	(Cor	n (Maise)Thera	peutic use)		(MINE A:TT)	

KORNEYEVA, L.S.; SOLDATOVA, T.G.

Exhibition of medical supplies and drugs made in Czechoslovakia.

Med. prom. 11 no.2:61-63 F 57 (MLBA 10:4)

(CZECHOSLOVAKIA--MEDICAL SUPPLIES)

The article "New Medicinal Preparations", by T. G. Soldatova, describes the properties and action of chloridine, i.e., 2.4-diamino-5-parachlorophenyl-6-ethylparimidine. Its structural formula is:

According to Soldatova, chloridine was synthesized at the All-Union Scientific-Research Chemicopharmaceutical Institute. It is a white crystalline powder; odorless, and has a melting point of 237 to 238 degrees. It is readily soluble in alcohol (2.9 grams in 100 grams of alcohol when heated) and in hydrochloric acid on heating. It is indicated in the therapy and chemo-prophylaxis of malaria. In acute malaria attacks chloridine is administered for adults in doses of 0.025 to 0.05 grams once or twice every 24 hours for a period of two to four days. The total dose of chloridine in the course of the treatment is 100 to 200 milligrams. Clinical investigation of the drug was conducted at the Institute of Malaria, Parasitology and Helmintology, Ministry of Health USSR. The Pharmacological Committee of the Scientific Council, Ministry of Health USSR, issued in 1955 a permit for the use of chloridine in medical practice. (Farmakologiya i Toksikologiya, No 1, Jan/Feb 57, p 85) (U)

54N-1574

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CIA-RDP86-00513R001652210007-7"

SOLDATOVA, T.G.

Susynthomycin. Farm. 1 toks. 20 no.1:85-86 Js-F'57. (MIRA 10:7)
(CHLOROMYCETIN)

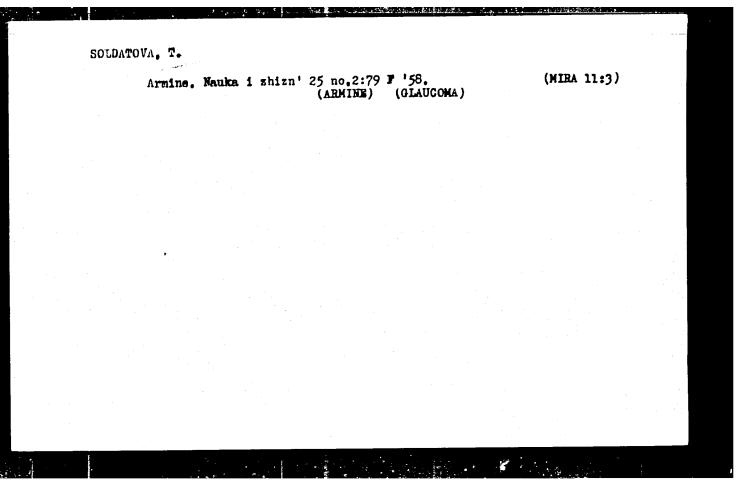
SOLDATOVA, T.G.

Cimarine, Farm. 1 toks. 20 no.1:86 Ja-F '57. (MIRA 10:7)

(CARDIAC GLYCOSIDAS)

Baco	dol. Farm.i to (NARCOTICS)	oks. 20 no.1:80	6 Ja-F 157.	(	(MLRA 10:7)	
	•					

Flaming. Ferm. i toks. 20 no.1:87 Js-F '57. (MIRA 10:7)
(FLAVAROME)



AUTHOR:

Soldatova, T.

SOV-25-58-10-46/48

TITLE:

Diabetes (Diabet)

PERIODICAL:

Nauka i zhizn', 1958, $\Lambda$ Nr 10, pp 78 - 79 (USSR)

ABSTRACT:

The author gives a detailed explanation of the causes of diabetes and lists various foreign medicines for the treatment of this illness, and also "Butamid" developed by the Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut (All-Union Scientific Research Institute

TO THE REPORT OF THE PROPERTY OF THE PROPERTY

of Chemistry and Pharmacy).

1 Diabetes--Therapy

Card 1/1

AUTHOR:

SULDATOVA,

Soldatova, T.

25-2-42/43

TITLE:

"Armine" (Armin)

PERIODICAL:

Nauka i Zhizn', 1958, # 2, p 79 (USSR)

ABSTRACT:

The Kazan' Institute of Chemistry and Technology has developed a new drug - armine. It belongs to the group of complex ethers of alkine phosphinic acids and is applied in case of glaucoma to narrow the pupils. Tests carried out with armine in the State Scientific Research Institute of Ophthalmology imeni Gel'mgol'ts proved that this drug is capable of reducing pressure within the eyes without causing substantial secondary reactions. The Pharmacological Committee of the Medical Council of Scientists of the Health Ministry of the USSR has

authorized the application of this new preparations.

AVAILABLE:

Library of Congress

Card 1/1

SOLDATOVA, T.G.

Propasine. Med.prom. 14 no.1:53-54 Ja 160.

(MIRA 13:5)

1. Rukovoditel' gruppy otdela lekaratvennykh sredstv AMN SSSR. (PROMAZINE)

SOLDATOVA, T.G.

Phenylin (2-phenylindandione-1,3). Med. prom. 14 no.5:55-56 My 160. (MIRA 13:9)

1. Rukovoditel' gruppy otdel lekarstvennykh sredstv AMN SSSR. (INDANDIONE)

Piridrol. Farm.i toks. 23 no.1:89 Ja-F '60. (MIHA 14:3)
(PIPERIDINEMETHANOL)

SOLDATOVA, T.G.

Mesocaine. Farm.i toks. 23 no.1:90 Ja-F '60. (MIRA 14:3)

(ANILINE)

SOLDATOVA, T.G.

Promeran, Farm.1 toks. 23 no.1:90-91 Ja-F '60. (MIRA 14:3)
(URFA)

PETROCHENKO, P.F.; SHAPIRO, I.I.: TEVEROVSKIY, P.A., inzh.; SOLDATOVA, T.I., inzh.; KOZLOVA, V.I., inzh.; MATOVA, A.D., tekhnik; ALEKSEYEV, S.A., dotsent, red.; CHERNOVA, Z.I., tekhn.red.

[Time norms established in the general machinery industry for finishing and cropping operations in iron, steel and nonferrous metal founding; large-lot and mass production] Obshchemashinostroitel nye normativy vremeni na ochistno-obrubnye raboty pri proizvodstve chugunnogo, stal nogo i tsvetnogo litia; krupnose-riinoe i massovoe proizvodstvo. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 57 p. (MIRA 13:1)

1. Moscow. Nauchno-issledovatel'skiy institut truda. TSentral'noye byuro promyshlennykh normativov po trudu. 2. Glavnyy inzhener TSentral'nogo byuro promyshlennykh normativov po trudu pri Nauchno-issledovatel'skom institute truda (for Petrochenko). 3. Zavedu-yushchiy otdelom mashinostroyeniya TSentral'nogo byuro promyshlennykh normativov po trudu pri Nauchno-issledovatel'skom institute truda (for Shapiro). 4. Sotrudniki TSentral'nogo byuro promyshlennykh normativov po trudu pri Nauchno-issledovatel'skom institute truda (for Teverovskiy, Soldatova, Kozlova, Matova).

(Founding--Stendards)

PETROCHENKO, P.F.; SHAPIRO, I.I.; TEVEROVSKIY, P.A., inzh.; SOLDATOVA. Tala, inzh.; KOZLOVA, V.I., inzh.; MATOVA, A.D., tekhnik; ALEKSEYEV, S.A., dotsent, red.; BARYKOVA, G.I., red.izd-va; KRIVOLAPOV, M.A., tekhn.red.

> [Time norms for finishing, cleaning and chipping processes in steel and nonferrous metal casting for general machinery manufacture; mass production] Obshchemashinostroitel'nye normativy vremeni na ochistno-obrubnye raboty pri proizvodstve chugunnogo, stal'nogo i tavetnogo lit'ia; seriinoe proizvodstvo. Moskva, Gos.nsuchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. (MIRA 12:12) 69 p.

1. Moscow. Nauchno-issledovatel'skiy institut truda. noye byuro promyshlennykh normativov po trudu. 2. Glavnyy inshener TSentral nogo byuro promyshlennykh normativov po trudu pri Nauchnoissledovatel'skom institute truda (for Petrochenko). 3. Zaveduyushchiy otdelom mashinostroyeniya TSentral nogo byuro promyshlennykh normutivov po trudu pri Nauchno-issledovatel skom institute truda pri Nauchno-issledovatel'skom institute truda (for Shapiro). 4. Sotrudniki TSentral'nogo byuro promyshlennykh normativov po trudu pri Nauchno-issledovatel skom institute truda (for Teverovskiy, Soldatova, Kozlova, Matova). (Founding)

CIA-RDP86-00513R001652210007-7"

APPROVED FOR RELEASE: 08/25/2000

SOLDATOVA, T.V., studentka 5 kursa (Odessa,ul.Kanguna,d.9/13,kv.41)

Acute obstruction due to a malignantly degenerated polyp of the small intestine. Klin.khir. no.7:74-75 Jl '62. (MIRA 15:9)

1. Kafedra gospital'noy khirurgii (zav. - koktor med.nauk K.G. Tagibekov) lechebnogo fakul'teta Odesskogo meditsinskogo instituta. (INTESTINES-CANCER) (INTESTINES-OBSTRUCTIONS)

KROTOVA, R.: SOLDATOVA, V.

We support the start made in Rostov. Fin.SSSR 21 no.4:72 Ap '60. (MIRA 13:4)

1. Predsedatel' mestkoma Zhdanovskogo rayfinotdela Moskvy (for Krotova). 2. Predsedatel' mestkoma Kalininskogo rayfinotdela Moskvy (for Soldatova).

(Education, Cooperative) (Finance-Study and teaching)

Mackharitev, S. D.; SADYKHOV, SH. G.; SCLDATOWA, V. A.

Dehydrochlorination of certain monochloroderivatives. Azerb.
neft. Khoz. li no.1:37-39 Ja '62 (MIRA 16:7)

(Hydrocarbons) (Hydrochlorine acid)

5/081/63/000/004/016/051 B166/B186

AUTHORS:

Topchiyev, A. V., Mekhtiyev, S. D., Sadykhov, Sh. G.,

Soldatova, V. A.

TITLE:

Study in the field of vinyl-substituted cyclane hydrocarbon

synthesis

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 4, 1963, 230 - 231, ab-

stract 42h102 (Azerb. khim. zh., no. 1, 1962, 51 - 61

[summary in Azerb.])

TEXT: An attempt was made to synthesize vinyl-substituted cyclane hydrocarbons (VCH) by condensation of C2H4 with monochlorcyclohexane (I) and commercially pure monochlormethylcyclohexane (II) in the presence of AlCl3, followed by conversion of the methyl-β-chlorethylcyclohexane (III) and ethyl-β-chlorethylcyc:lohexane (IV) thus formed into the respective acetates, which are partially converted into VCH on pyrolysis. At a temperature from the chlorethylcyc:lohexane (IV) thus formed into the respective acetates, which are partially converted into VCH on pyrolysis. -40 to -45°C, a molar ratio of II to  $C_2H_4$  of 1: 1, 0.5 hr reaction time and with AlCl 3 5.5 - 7.5% of the weight of II, the yield of the condensation Card 1/3

S/081/63/000/004/016/051 B166/B186

Study in the field of vinyl-substituted ...

products is 75.5% of the converted II. For I the yield of condensation products is 56% of the converted I at a temperature between -30 and -35°C, with a 2 : 1 molar ratio of C2H4 to I, 0.5 hr reaction time and an AlCl3 consumption of 8.5 - 10% of the I taken. The main condensation products of C2HA with I and II are III (yield 60%, calculated on reacted I, b.p. 79 - $83^{\circ}$ C/10 mm Hg,  $n^{20}$ D 1.4702,  $d_4^{20}$  0.9725) and IV, yield 48%, calculated on converted II, b.p. 93 - 94°C/10 mm Hg, n<sup>20</sup>D 1.4750, d<sub>4</sub><sup>20</sup> 0.9610. of III and IV with CH3COOK in CH3COOH was carried out at atmospheric and elevated pressures. It was found that at 180 - 200°C, 15 - 20 atm, reaction time 5 - 6 hrs and molar ratios of CH3COOH, CH3COOK and chloride of 0.5 -1.0 : 1 : 1 the yield of methylcyclohexylethylacetate (Y) (b.p. 100 -1030/10 mm Hg, n<sup>20</sup>D 1.4540, d<sub>4</sub> 20 0.9506) and ethyloyclohexylethylacetate (VI) (b.p. 116 - 119°C/10 mm Hg, n<sup>20</sup>D 1.4574, d<sub>4</sub><sup>20</sup> 0.9519) was 80 - 85% (calculated on converted chloride). V and VI were pyrolized at 500 - 520°C in a quartz tube filled with Pyrex glass packing. It was shown spectrographically that Card 2/3

S/081/63/000/004/016/051 B166/B186

Study in the field of vinyl-substituted... B166/B186

the pyrolysis product of V (b.p. 140 - 142°C, n<sup>20</sup>D 1.4508, d<sub>4</sub><sup>20</sup> 0.8163) and that of VI (b.p. 66 - 70°C/20 mm Hg, n<sup>20</sup>D 1.4588, d<sub>4</sub><sup>20</sup> 0.8280) are mixtures of the respective VCH and alkylcyclohexenes. [Abstracter's note: Complete translation.]

Card 3/3

# s/0249/63/019/010/0019/0024

ACCESSION NR: APLO17570

AUTHORS: Mekhtiyev, S. D.; Sadyskhov, Sh. G.; Seldatova, V. A.

TITLE: Investigation on the synthesis of vinyleubstituted cyclane hydrocarbons

SOURCE: AN AzerbSSR. Doklady\*, v. 19, no. 10, 1963, 19-24

TOPIC TAGS: cycloparaffins, naphthene, cyclane, cyclohexane, cyclohexane synthesis, monobromocyclohexane, l, l-ethylvinylcyclohexane, monochloroethylcyclohexane, ethylvinylcyclohexane, condensation, pyrolysis, ethylene, acetate, potassium acetate

ABSTRACT: The synthesis of 1, 1-ethylvinylcyclohexane (1-EVCH) on a monochloroschylcyclohexane (MBCH) base and of ethylvinylcyclohexane (EVCH) on a monochloroschylcyclohexane (MCECH) base is reported. The synthesis of 1-EVCH was conducted in three stages: the condensation of ethylene with MBCH, the conversion of the condensation products into acetic ethers, and the pyrolysis of the ethers. The optimum condensation reaction took place in the presence of 6-7% AlCl<sub>3</sub>, at a temperature range of minus 30-40C for a period of 30 minutes, using a 1:2 molar ratio of MBCH to ethylene. This resulted in a 70-72% yield, which was then reacted with potassium acetate for 5-6 hours in a 1:1 molar ratio, at 180-200C, under pressure up to 20 Card 1/2

## ACCESSION NR: APLO17570

atm. The final step was pyrolysis of the acetate at 500-520C, yielding 1-EVCH, the constants of which are given. The synthesis of EVCH was conducted on a NCEM base, by an analogous three-stage process. However, in this case the condensation of MCECH with ethylene was on a 1:1 molar basis. After the acetate and pyrolysis steps a product, the constants of which identified it as EVCH, was obtained. Orig. art. has: 2 formulas.

ASSOCIATION: Institut neftekhimicheskikh protector (Institute of Maphtha-Chemical

Processes)

SUPPLITTED: 26Jun63

DATE ACQ: 18March

MCL: 00

SUB CODE: CH

NO REF SOV: 008

OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652210007-7"

The second secon

MEKHTIYEV, S.D.; SADYKHOV, Sh.G.; SOLDATOVA, V. A.

Synthesis of vinyl-substituted cyclohexane hydrocarbons. Azerb. khim.zhur. no.4:79-84 164. (MIRA) (MIRA 18:3)

GUS'KOVA, A.K.; DRUTMAN, R.D.; MALYSHEVA, M.S.; SOLDATOVA, V.A.

Determination of the dosis and the possibility of clinical diagnosis of disease caused by exposure to Po210. Med. rad. 9 no.8:51-60 Ag '64. (MIRA 18:4)

1. Radiologicheskoye otdeleniya kliniki Instituta gigiyeny truda i professional'nykh zabolevaniy (dir. - deystvitel'nyy chlen AMN SSSR. prof. A.A.Letavet) AMN SSSR.

1 17594-63

· EMP(q)/EMT(m)/BDS

AFFTC/ASD/APGC Pq-4

s/0286/63/000/008/0038/0038

ACCESSION NR: AP3006676

Buzhinskiy, I,M.; Michurina, A. A.; Soldatova, V. N.

TITLE:

Optical glass with a low refractive index. Class 32, No. 15400

SOURCE: Byul. izobreteniy i tovarny\*kh znakov, no. 8, 1963, 38

TOPIC TAGS: glass, optical glass, low refractive index, refractive index, optical glass composition, composition, silicon dioxide, aluminum oxide, potassium fluoride, iron

ABSTRACT: An Author's Certificate has been issued for optical glass containing SiO2 and Al2O3 and having a low refractive index 15 The optical glass has a refractive index of 1.4273-1.5000, an average dispersion of 0.00600-0.00805, and a dispersion coefficient of 71-62. The composition of the glass is as follows: SiO<sub>2</sub>, 26-80%; Al<sub>2</sub>O<sub>3</sub>, 7-40%; KF, 4.5-36%; and, in addition to a combination of these components totaling 100%, up to 6% F.

ASSOCIATION: none

SUPMITTED: 10May62 SUB CODE: PH, MA

DATE ACQ: 30Sep63 NO REF SOV:

ENCL: 00

Card 1/1.

STARKOVA, T.G.; SHUVALOVA, Ye.P.; SOLDATOVA, V.M.; TKACHEVA, T.V. (Leningrad)

Leucocyte reaction and immunological indices in rabbits in response to teh action of X rays. Med.rad. no.7:87-88 '61. (MIRA 15:1)

(X RAYS—PHYSIOLOGICAL EFFECT) (LEUCOCYTES)
(IMMUNITY)

YARYM-AGAYEV, N.L.; KOGAN, Ye.A.; SOLDATOVA, Ye.D. (Donetsk)

Calculation of the saturated vapor pressure in binary systems in which the chemical interaction between components occurs in the vapor phase. Zhur. fiz. khim. 36 no.6:1173-1179 Je'62 (MIRA 17:7)

1. Donetskiy politekhmicheskiy institut i Institut gornogo dela AN UkrSSR.

L 31512-66 EWT(m)/EWP(t)/ETI IJP(c) JD/JWSOURCE CODE: UR/0076/66/040/002/0458/0460 ACC NR: AP6008095 AUTHOR: Semenchenko, V. K.; Soldatova, Ye. D. 7 15 7 100 8 ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosurdarstvennyy universitet) TITLE: Thermodynamic stability of germanium and silicon near absolute zero SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 2, 1966, 458-460 TOPIC TAGS: germanium single crystal, silicon single crystal, thermodynamic calculation, thermal expansion ABSTRACT: The determinant of thermodynamic stability D-1 per unit volume, \$11 \$12 \$12 UDC: 541.11 Card 1/2

#### CIA-RDP86-00513R001652210007-7 "APPROVED FOR RELEASE: 08/25/2000

0

L 31512-66

ACC NR: AP6008095

(where  $\mathbf{s}_{ij}^T$  are the isodynamic elastic coefficients,  $\alpha_{i}^T$  is the isodynamic coefficient of thermal expansion,  $c_p$  is the heat capacity at constant pressure, and  $\rho$  is the density of the crystal) was studied for germanium and silicon crystals. The values of D<sup>-1</sup> were computed for germanium in the 0.5—120K temperature range and for silicon in the 12—180K range on a "Ural 1" computer. In both cases,  $D \rightarrow \infty$  when  $T \rightarrow 0$  (for Ge, in accordance with the law ~T-2). The mechanical minors remain finite, and constant for Si. Although the coefficient of thermal expansion exhibits an anomalous behavior, the stability of the system does not show any anomalies. Orig. art. has: 2 figures.

SUB CODE: 07 / SUBM DATE: 19Mar65 / ORIG REF: 008 / OTH REF: 010

Card 2/2 MC

L 01817-67 EWT(1) UR/0076/66/040/005/1082/1085 ACC NR. AP6035639 SOURCE CODE: SEMENCHENKO, V. K. and SOLDATOVA, Ye. D., Moscow State university 1men1 M. V. Lomonosov "Thermodynamics of Transcritical Phenomena in Condensed Systems" Moscow, Zhurnal Fizicheskoy Khimii, Vol XL, No 5, May 1966, pp 1082-1085 Abstract: A new type of phase transition was investigated -mesophasal or transcritical transitions. They occur within a specific interval of thermodynamic forces, are fluctuating, and consist of the passing through the region of reduced stability, exhibiting properties of two quasiphases (mesophase). The term quasiphase was introduced because in the region of transition in question, the system remains monophasal. Mathematically, the transition is expressed in the passage of adiabatic and isodynamic coefficients of stability and D in the region of the transition through finite minima (D  $\neq$  0, dD = 0). Comparison of the behavior of the determinant of the stability of liquid vapor systems in transcritical transitions (water) and the system ferromagnetic - paramagnetic in the region of the Curls stemperature (nickle), and also the effect of thermodynamic forces on their stability in the transcritical region makes it possible to conclude that these transitions are identical from the thermodynamic point of view. UDC: 541.11

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ı	Orig. art. has: 3 figures. [JPRS: 37,17]  TOPIC TAGS: thermodynamics, curie point										
	SUB CODE:	20 / SUBM	DATE:	none /	ORIG REF:	015 / ОТН	REF:	010			
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	Card 2/2	fv			· ·						

YOUNG STUCK OF PEDIGREED ALA-TAU CAMPLE UNDER A DIFFERENT
RECIME OF MAINTENANCE." FRUNZE, 1960. (COM HIGHER AND
SEC SPEC ED UNDER THE COUNCIL OF MINISTERS KISSR, KIRGIZ
AGR INST IM K. I. SKRYABIN, KIRGIZ NEFT SCI RES INST) OF
ANIMAL HUSBANDRY AND VETERINARY SCIENCE). (KL, 3-61,226).

346

SOLDATOVA, YE. K., CAND MED SCI, "ON PROBLEMS OF LATE

FUNCTIONAL DISORDERS OF THE GASTROINTESTINAL TRACT FOL
LOWING RESECTION OF THE STOWAGH PEPTIC ULCER.

ACCOUNTY MATERIAL OF "LIKANI" SANATORIUM)." TBILISI, 1960.

(TBILISI STATE MED INST). (KL, 3-61, 235).

465

KARZINKIN, G.S., SOLDATOVA, Ye. V., SHEKHANOVA, I.A.

Some results of mass tagging of "nonstandard" young sturgeon with radioactive phosphorus. Migr.shiv. no.1:27-40 '59.

(MIRA 13:6)

1. Veesoyuznyy nauchno -isəledovatel'skiy institut rybnogo khozyaystva.

(Sturgeon)

SOLDATOVIC, D

YUGOSLAVIA/Analytical Chemistry - Analysis of Organic Substances E-3

Abs Jour : Ref Zhur - Khimiya, No 4, 1958, No 11077

Author : Moncilo Mokranjac, Sava Radnic, Danilo Soldatovic

Inst : Not Given
Title : Nephelometric Determination of Alkaloids

Orig Pub : Acta pharmac. jugosl., 1957, 7, No 1, 29-32

Abstract: The possibility of the application of Scheibler's, Sonnenstein's, Pertrand's, Mayer's, Marme's and Mayer-Welser's

reagents to the quantitative determination of 20 various alkaloids was investigated. 3 drops of 0.5%-unl HCl, 5 crops of the corresponding reagent and water up to 3 mlit are added to 1 mlit of the equeous solution of the alkaloid salt in the nephelometer ditch. Nephelometry is carried out after 10 to 30 min. of seasoning. The minimum and maximum amounts of alkaloids, which can be determined nephelometrical-

ly with various reagents are presented.

Card : 1/1

18

# APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652210007-7"

D. SULDATOWED and O. PHITOWIC, Copartment of Toxicologic Chemistry, Setton of Phase of Charlett as tokaskolosku hesiju Farmaceutskog Liberteens Jakon vie al Delgrade.

"Peceratriction of Carbon Disulfide in Brine."

and to a read a function of the first first

10 to the Salate of Taraballa, vol 12, No 4, 1962; pp 257-261.

place is remove modified; Describe method of analysis for the property modification of Pujimoto's method, photocolorimetry. The allowards. Four tables, standard curve, 3 references include

YUGUSLAYI L

D. SCIDATOV., and I. PETHOVIC, Institute of Toxicological C suistry of Faculty of Inarmacy (Institut as toksfroightu heatin, Passac Tutaki fakultet) beigraús.

"The Textsologic Role of Trioniorethylene and its Determination in the Urine."

Belgrade, in ity za Parmaciju, Vol 12, No 5, 1952; pr 303-307.

Abstract: I stew of texteologic and metabolic studies, report of method for determination of the trichloracetic acid in orine, urine tests in 32 exposed workers from 3 beignade factories. Trichlorethanul was higher than trichloracetic acid; duration of exposure changed the urinary concentration in the same person over various periods of time. Three tables; German 2 French references.

1/1

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652210007-7"
SOLDATOVIC, D.; PETROVIC, C., and NEDELJKOVIC, M.; Department of Toxicologic

SOLDATOVIC, D.; PETROVIC, C., and NEDELJKOVIC, M.; Department of Toktoologic Chemistry of College of Pharmacy (Institut za toksikolosku hemiju Farmaceutskog fakulteta) Belgrade.

"Solubility of Lead Triphosphate in some Lead-Mobilizing Drugs."

Belgrade, Arkhiv za Farmatsiju, Vol 16, No 2, 1966; pp 89-93.

Abstract French summary modified]: Solubility of title compound was found to be greater in aqueous solutions of penicillin, streptomycin, PAS or oxytetracycline than in water; greater in saline solutions of same drugs than in pure physiologic saline. Two tables; 3 Yugoslav and 8 Western references.

LUKIC, Predrag; SOLDATOVIC, Milan

O lincuri; Gentiana lutea L., Gentianaceae. Arh.farm. Beograd 5
no.2-3:88-92 Apr-July '55.

(PLANTS,
Gentiana lutea, ther. use & cultivation (Ser))

SUCTAME (In caps); Given Names

Country: Yugoslavia

Academic Degrees: not given

Affiliation: Assistent of the Institute for Herb Research of the PRS People's Republic of Serbia (Institut sa prouesvanje

lekovitog bilja NRS) Source: Belgrade, Arhiv za Farmaciju, Nr 6, 1960, pp 437-439.
Data: Some Problems in Scientific Research of Medicinal Herbe

SULTIALE (In cape); Given Names

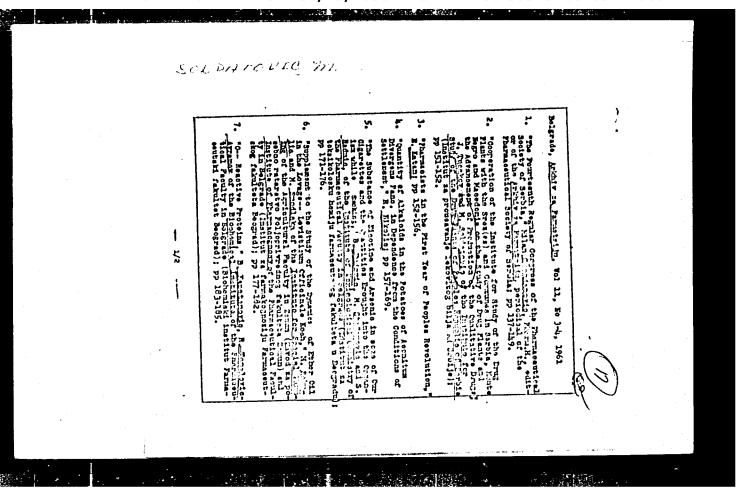
Country: Yugoslavia

Academic Degrees: \_ not given /

Affiliation: not given

Bolgrade, Arhiv za Farmaciju, No 1, 1961, pp 37-38. Source:

Book Review: "Growing of Medicinal and Spice Herbs," by Ratomir Radovanovic (Yugoslav). Data:



J. 100-807 and P. SOLDATOVIC CAffiliation to b given,

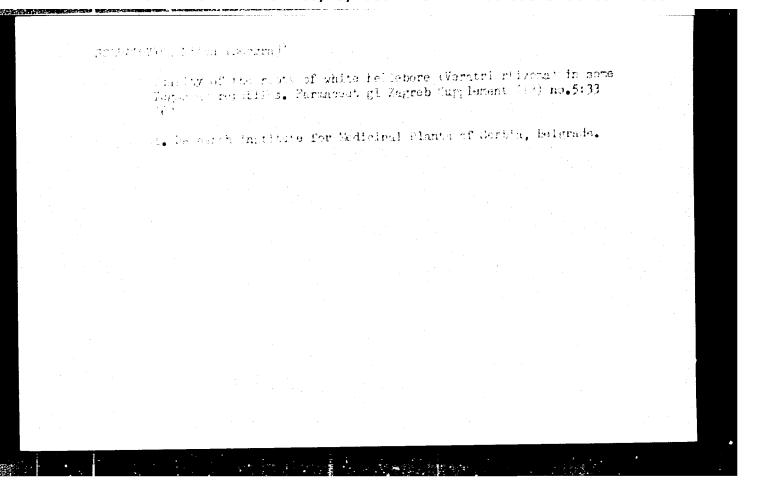
"Research and Production of Medicinal Plants in the USSR.

Belgro is, athiv as Farmaciju, Vol 12, No 5, 1962; pp 362-384.

Abstract: Mainly data from the authors' study torp financed by UN Yeah Heal Aid Administration; very good description of VILAR (All-Union Institute for Medicinal and Aromatic Plants) in Moscow; ... Inedicinal plan research in the USSR is better organized than in the Mest because there is no larrow side-taking, none of the often sterile individualism which hampeed research.."

1/1

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TUCKKOV, Jovan (Beogras): SOLDSTOVIC, Milan (beogras)

Cooperation of the desearch Institute for Medicinal Flants of Serbia with the districts and municipalities in Serbia, Montenegro, and Macedonia in the studies of medicinal plants and in the advancement of production of nigh-quality drugs. Farmaceut gl Zagreb Supplement (18) ne.5:46 162

1. Research Institute for Medicinal Plants of Serbia, Belgrade.

Mg = UV , 15 cm - company in Scienti. Farmancon po Tagrat Capplement 10) ro. vi52 to .

. Raccard incufrate for Medicinal plants of Serbia, Balgrade.

e the product has the transfer of the contract

MINOUSEAVIA

M.S. SOLDATOVIC and O.D. ILIC, lastitute for the Study of Medicinal Plants (In. NOT to implicit lekovitag bilia) of People's Republic of Doubla (In. ) today Southlike/ Stbija), beiggade.

"Study of the Applicy of Shizome of Veretian album from some of our

23-248. Arhiv za Formeiju, Vol 12, No 4, 1962; pp 243-248.

Afrench swemary modified?: Commercial specimens of root of the properties of runder of Yugoslav babitats and commercial subtracts were studied. Most specimens were well within (Yugoslav Barrampela II) telerances: 14 minimum alkaloids, 12% maximum ashes. Both Parkad specimens were generally poorest in alkaloids (average with it is specimens) while those from Bosnia - Hercegovina were removed in them (1.46%, & specimens.) Four tables, 10 references thereat V parkadopolas, 3 materia medica texts.

1.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652210007-7"

YUGOSLAVIA

Milan S. SOLDATOVIC [Affiliation not given.]

"Medicinal Plants - Source of Pharmaceutical Industrial Products."

Belgrade, Arhiv za Farmaciju, Vol 13, No 1, 1963; pp 74-76.

Abstract: Indignant protest against sloppy planning of Yugoslav cultivation of medicinal plants, squandering national riches by abandoning valuable and well-established cultures at times of obviously very temporary saturation of international markets, then a few years later same plants must be imported even from Western Europe at high cost; many examples and exhortations.

LDATOVIC PUTNIK, Milan; PLAVEC, Vladimir; SOLDATOVIC, Svetislav Repair of Arms of the Comment of

> Case of hypernephroma malignum. Srp arhiv lekar 82 no.2:254-259 F 154. (**EEAL** 3:7)

1. II Hirursko odeljenje Glavne pokrajinske bolnice u Movom Sadu, v.d. sefa: dr. Milan Putnik; Prosektura Glavne pokrajinske bolnice u Novom Sadu, sef: dr. Vladimir Plavec. (Rad je Urednistvo primilo 10-VII-1953 god.) (ADRIMAL GLANDS, neoplasms

\*hypernephrom)

### ONCOLOGY

### YUGOSLAVIA

SOLDATOVIC, Svetislav; KOSTIC, Vojislav; MIHAILOVIC, Zoran; PEJOVIC, Dragoljub and STOJANOVIC, Dragan; Department of Surgery of General Hospital (Hirursko odeljenje Opste bolnice) Head (Nacelnik) Prof Dr Nikola GJUKNIC, Nis.

"Spongious Osteoma of the Fourth Lumbal Vertebra."

Belgrade, Srpski Arkhiv za Tselokupno Lekarstvo, Vol 93, No 3, Mar 65; pp 309-313.

Abstract [English summary modified]: Diagnosis of this unusual lesion and easy surgical excision brought complete recovery in man aged 43, after two years of virtual disability attributed to minor trauma during heavy lifting. Roentgenogram, photomicrograph, 2 Yugoslav and 4 Soviet references, 2 US references; ms rec 14 Jul 64.

1/1

SOLDATOVIC, Svetislav; ESIC, Zoran

Dysplasia fibrosa polyostotica (Jaffe-Lichtenstein). Srpski arch. celok. 1ek. 91 no.11:1063-1069 N\*63

1. Hirursko odeljenje Opste bolnice u Nisu (nacelnik: prof. dr. Nikola Cuknic); Rendgenolosko odeljenje Opste bolnice u Nisu (zam. nacelnika: dr. Zoran Nesic.)

SOLDATOVIC, Svetislav; STANOJLOVIC, Zivojin

Tuberculous trochanteritis. Tuberkuloza 16 no.3:282-288 My-Ag '64

HESEL, Zoren; SOLDATOVIC, Systislav; S' ON JLOVIC, Zivejin

On a case of chondrocalcinosis articularis diffuse. Srpski arh. celok. lek. 42 no.1:39-92 Ja 164

1. Hirursko odeljenje Opste bolnice u Nisu (Nacelnik: prof. dr. Nikola Duknic) i Rendgenolosko odeljenje Opste bolnice u Nisu (Zam. nacelnika: dr. Zoran Nesic).

The second Social Wile, evenied at the second secon

SOLDATOVIC, Svetislav; LUKIC, Miodrag

Malignant synovioma. Srpski arh. nelok. lek. 92 nc.9:391-595 S<sup>1</sup>64.

1. Hirursko odeljenje Opste bolnice u Nisu (Nacelnik: prof. dr. Nikola Djuknic).

publicated diagnosis of tumors of the locanotor apparatus.

There are, leke 92 no.12:1175-1182 D 164.

1. Hirursko odeljenje Opute belnicu u Nisu (Nacelnik: prof. dr. hikaia Duknic).

the state of the s

SOLDATOVIC, Svetislav; KOSTIC, Vojislav; MIHALLOVIC, Zoran; PEJOVIC, Lragoljub; STOJANOVIC, Dragan.

Ostroma spongiosum of the 4th lumber vertebra. Srpski arh. celok. lek. 93 no.3:309-313 Mr ' 65.

1. Hirursko odeljenje Opste bolnice u Nisu (Nacelnik: prof. dr. Nikola Djuknic).

YUGOSLAVIA/Human and Animal Physiology - (Normal and Fathological). T Metabolism. Water-Salt Metabolism.

: Ref Zhur Biol., No 4, 1959, 17219 Abs Jour

: Mikranjats, Momchilo St., Radmich, Sava., Soldatovich,

Author Danilo

: The Content of Tin in the Blood of Various Animals under Inst

Normal Conditions. The Influence of Penicillin on Tin Title

Mobilization in the Organism of Healthy Animals and

Humans.

: Acta pharmac. jugosl., 1958, 8, No 2, 41-45 Orig Pub

: No abstract. Abstract

Card 1/1

On the effect of the temperature of the medium... S

5/796/62/000/003/015/019

of the scintillator crystals: A survey is made of the principal findings of 6 Western researchers on the intensity of the light flash that occurs in pure NaI crystals and in NaI(T1) crystals under various types of ionizing radiation, and, more specifically, on the T effect which presumably can be attributed to the Tl activator therein. The primary practical value of such studies lies in the selection of optimal T's for obtaining the highest possible fluorescence intensity in scintillator crystals and also for the design of scintillators that are not T sensitive over a broad T range. The latter is the primary objective of this paper (desired T range: ±50°C). Of especial interest is the investigation of the T effect on the slow components of the scintillation, since they may be utilized for the separate registration of neutron and yquantum impulses. The present investigation consists of two parts: (1) Investigation of the OSA of various Soviet PhM's with exposure of the photocathode to illumination by a standard light-pulse generator; (2) the same under exposure to the scintillation flashes of various scintillator crystals (SC) irradiated by a standard y-radiation source. Comparison of (1) with (2) yielded: (a) An appraisal of the T effect on the Soviet SC's and PhM's investigated; (b) identification of a relatively T-insensitive combination of PhM and SC. Experimental setup and measurements: The general scheme of the test setup is described and illustrated. It comprises a thermostat, an automatic T control, a light-pulse generator, a cathode repeater with PhM equipped with divider, an amplifier ("Siren!"), a single-channel amplitude analyzer

Card 2/4

On the effect of the temperature of the medium...

S/796/62/000/003/015/019

("Kashtan"), and a scaling circuit with a stabilized HV source ("Floks"). In view of the volumetric and T-range inadequacy of existing ultrathermostats (UT), a modified G. M. Suchkov UT (first developed in 1957) was employed; the heat carrier is ethyl alcohol to avoid any change of state in the ±50°C range. A two-stage centrifugal pump ensures intense heat-carrier circulation. Other details are described and shown in a schematic cross-section. T balance between PhM and the medium is attained within 40 min. The light-pulse generator should create pulses of duration similar to that of the crystal scintillation. In the present tests the light-pulse source consisted of the fluorescence of the glass (cf. Fleyshman, D.G., et al., Pribory i tekhnika eksperimenta, no. 6, 1957, 101) of an ordinary oscillograph tube under electron bombardment. Details of the light-pulse generator are described and shown in schematic cross-section. Experimental results: The experimental error was found to be 8%. The stability of the PhM was verified; the output-pulse peak shift was 3% in 10 hrs. The total change in amplitude within  $\pm 50^{\circ}$ C is 3-18%; a  $\pm 10^{\circ}$  deviation from  $\pm 20^{\circ}$  entails an amplitude range of 2-7%. i.e., within the accuracy of the experiment. Curves are plotted for two types of Soviet PhM's, showing that under illumination of the photocathode by a standard light-pulse generator the signal-amplitude (SA) T dependence is a function of the material and design of the PhM. In PhM's with (Cu, Al, Mg) alloy dynodes of boxlike structure the amplitude curves have a fairly distinct maximum in the -10 to +200 range, an effect that is attributed to a change in the initial velocities of the electrons Card 3/4

On the effect of the temperature of the medium...

S/796/62/000/003/015/019

at their exit from the emitters, which leads to an impairment in focusing and a loss of part of the electrons. In PhM's with Sb-Ce dynodes of trough-shaped structure, an increase in SA with T above room T is observed; this is attributed to Ce evolution into the PhM space. In PhM's with (CuAlMg)-alloy dynodes and a shutter-like structure, no T dependence of the SA was found. The effect of the T of the medium on the OSA of a scintillation counter consisting of T-stable FEU-11B PhM in combination with various inorganic scintillator crystals (NaI(Tl), CsI(Tl), and KI(Tl)) and organic crystals (stilbene, naphthalene, and tolane) is investigated; the tests were performed with 5-μcurie Cs<sup>137</sup> standard γ-sources. The combination of an FEU-11B PhM with a KI(Tl) crystal is recommended as a scintillation counter for the -50 to +50°C range, since it is T-insensitive to within 10%, an error which is admissible in field-test conditions. Within the range from -10 to +50°C a combination consisting of an FEU-11B or FEU-13 PhM and NaI(Tl) or CsI(Tl) scintillators is practically T-insensitive. There are 7 figures and 14 references (2 Russian-language Soviet and 12 English-language).

ASSOCIATION: None given.

Card 4/4

L 25340-65 EWT(m)/T IJP(c)

ACCESSION NR: AR4046134

\$/0272/64/000/007/0165/0165

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika. Otdel'nyy vypusk, 7.32.1015

AUTHOR: Stolyarova, Ye. L.; Soldayeva, L. S.; Suchkov, G. M.

TITLE: Effect of environmental temperature on the readings of a scintillation counter, and the scintillation intensity of some scintillators

CITED SOURCE: Sb. Stsintillyatory i stsintillyats. materialy. Khar'kov, Kar'kovsk. un-t. 1963, 99-105

TOPIC TAGS: scintillation counter, environmental temperature, scintillation burst intensity, photomultiplier, signal amplitude analysis, potassium iodide counter, thallium activator, radiometry

TRANSLATION: The authors solved problems related to the design of a scintillation counter with minimal dependence of its readings on environmental temperature within the range from -50 to +50C. The study included an analysis of the output signal amplitude in various types of domestically manufactured photomultipliers, using a generator of standard light pulses to illuminate the photocathode, and an

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